

REMARKS

Claims 1, 5, 6, and 10 are currently being amended to further particularly point out and distinctly claim what Applicant regards as the inventive subject matter. Basis for the amendments can be found in Applicant's specification on page 5, line 1-2, and previously presented claim 5.

These amendments do not introduce new matter within the meaning of 35 U.S.C. §132. Accordingly, the Examiner is respectfully requested to enter these amendments.

1. Rejection of Claims 1-10 Under 35 U.S.C. §102(e)

The Office Action states,

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Berthold et al. (US Patent 6,713,561). The molding composition disclosed by Berthold et al. (US Patent 6,713,561) overlaps the limitations of the composition in the instant claims.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention 'by another,' or by an appropriate showing under 37 CFR 1.131.

RESPONSE

Applicant respectfully traverses the rejection of claims 1-10.

Anticipation:

For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990). Additionally, the reference must, "sufficiently describe the claimed invention to have placed the public in possession of it." *Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1572, 24 U.S.P.Q.2d 1321, 1332 (Fed. Cir. 1992).

Accordingly, Applicant respectfully believes U.S. Patent 6,713,561 to Berthold, et al. (herein referred to as "Berthold, et al.") fails to disclose, teach, or suggest, "A polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm³ at 23 °C, a MFI_{190/5} in the range from 0.1 to 0.3 dg/min or a MFI_{190/21.6} in the

range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition, and the polyethylene composition comprises a stress-crack resistance (FNCT) in the range of from 60 to 110 h."

First and foremost, Applicant respectfully believes the Examiner has not outlined where Berthold, et al. discloses, teaches, or suggests Applicant's currently claimed polyethylene composition comprising:

- (i) a multimodal molecular mass distribution;
- (ii) a density in the range of from 0.949 to 0.955 g/cm³ at 23 °C;
- (iii) a MFI_{190/5} in the range from 0.1 to 0.3 dg/min or a MFI_{190/21.6} in the range of 4 to 6 dg/min;
- (iv) 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A;
- (v) 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and
- (vi) 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer.

In particular, the current Office Action merely states on page 2, lines 16-17,

The molding composition disclosed by Berthold, et al. (US Patent 6,713,561) overlaps the limitations of the composition in the instant claims.

Applicant respectfully points this out because, even if true, which Applicant respectfully denies, Applicant respectfully believes this in and of itself is not enough to satisfy an anticipation under the statute. In fact, to render a claim anticipated, the identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), (Emphasis added). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990), and the reference must, "sufficiently describe the claimed invention to have placed the public in possession of it." *Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1572, 24 U.S.P.Q.2d 1321, 1332 (Fed. Cir. 1992).

In other words, a document which may or may not overlap the limitations of the composition in the instant claims, in and of itself does not necessarily render a claim anticipated under the statute; the document cited has to disclose the claimed subject matter with, "sufficient specificity to constitute an anticipation under the statute." See MPEP §2131.03 II. Additionally, the reference must, "sufficiently describe the claimed invention to have placed the public in possession of it." *Minnesota Mining & Mfg. Co.*

v. Johnson & Johnson Orthopaedics, Inc., 976 F.2d 1559, 1572, 24 U.S.P.Q.2d 1321, 1332 (Fed. Cir. 1992).

Accordingly, since the current rejection falls short of identifying exactly where in Berthold, et al. each and every limitation of Applicant's currently claimed polyethylene composition is sufficiently disclosed to constitute an anticipation under the statute, Applicant respectfully believes for this reason alone the current rejection should be withdrawn. However, if the Examiner maintains the current rejection, Applicant respectfully requests the Examiner to identify exactly where in Berthold, et al. each and every limitation of Applicant's currently claimed polyethylene composition is sufficiently disclosed to constitute an anticipation under the statute.

Notwithstanding the above, Applicant has amended claims 1, 5, 6, 10, and 11 to further recite that the polyethylene composition comprises a stress-crack resistance (FNCT) in the range of from 60 to 110 h, whereas Berthold, et al. discloses moulding compounds comprising a stress-cracking resistance ranging from 3.7-54.2 h. See Table 1-continued, col. 7, lines 1-10, in Berthold, et al.

Accordingly, Applicant respectfully believes the currently claimed polyethylene compositions comprise a stress-crack resistance ranging from about 10% to about 2,973% greater than the compounds disclosed in Berthold, et al.

In light of the above, claims 1-10 are therefore believed to be patentable over Berthold, et al. Accordingly, allowance of the

claims is earnestly requested.

2. Double Patenting

The Office Action states,

Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,713,561. Although the conflicting claims are not identical, they are not patentably distinct from each other because the molding composition disclosed by Berthold et al. (US Patent 6,713,561) overlaps the limitations of the composition in the instant claims.

RESPONSE

Applicant respectfully traverses the rejection of claims 1-10. All arguments regarding Berthold, et al. *supra* are incorporated herein by reference in their entirety.

Non-statutory, Obviousness-type Double Patenting:

The doctrine of double patenting seeks to prevent the unjustified extension of patent exclusivity beyond the term of a patent. The public policy behind this doctrine is that:

The public should. . . be able to act on the assumption that upon the expiration of the patent it will be free to use not only the invention claimed in the patent but also modifications or variants which would have been obvious to those of ordinary skill in the art at the time the invention was made, taking into account the skill in the art and prior art other than the invention claim in the issued patent.

In re Zickendraht, 319 F.2d 225, 232, 138 USPQ 22, 27 (CCPA 1963) (Rich, J., concurring).

In determining whether basis for an obviousness-type double patenting rejection exists, the analysis employed parallels the guidelines for a 35 U.S.C. 103(a) rejection. In particular, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), are applied for establishing a background for determining obviousness under 35 U.S.C. 103, and are then applied for determining an obvious-type double patenting analysis. These factual inquiries are summarized as follows:

- (A) Determine the scope and content of a patent claim relative to a claim in the application at issue;
- (B) Determine the differences between the scope and content of the patent claim as determined in (A) and the claim in the application at issue;
- (C) Determine the level of ordinary skill in the pertinent art; and
- (D) Evaluate any objective indicia of nonobviousness.

The conclusion of obviousness-type double patenting is made in light of these factual determinations.

Additionally, any obviousness-type double patenting rejection should make clear:

- (A) The differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at

issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent.

Moreover, when considering whether the invention defined in a claim of an application would have been an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art. *General Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1279, 23 USPQ2d 1839, 1846 (Fed. Cir. 1992), (Emphasis added).

With respect to the current rejection, currently pending claims 1-5 are directed towards a polyethylene composition; claims 6-9 are directed towards a process for producing a polyethylene composition; and claim 10 is directed towards a process for producing a container. All currently pending claims (i.e., claims 1-10) are submitted herewith as ATTACHMENT A.

With respect to U.S. Patent 6,713,561 (herein referred to as "Berthold, et al."), claims 1-2 and 5-9 are directed towards a molding compound; claims 3-4 are directed towards a method for producing a polyethylene compound; claims 10-11 are directed towards an article; and claim 12 is directed towards a process to make an article. Claims 1-12 of Berthold, et al. are attached herewith as ATTACHMENT B.

Currently pending claims 1-5:

Claim 1 of the current application recites,

A polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm³ at 23 °C, a MFI_{190/5} in the range from 0.1 to 0.3 dg/min or a MFI_{190/21.6} in the range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition, and the polyethylene composition comprises a stress-crack resistance (FNCT) in the range of from 60 to 110 h.

Applicant respectfully believes none of claims 1-12 in Berthold, et al. recite the same, or an obvious variant, of currently pending claim 1. Additionally, currently pending claims 2-5 depend directly or indirectly from currently pending claim 1, and necessarily include all of the limitations therein.

As such, Applicant believes claims 1-5 are patentably distinct from claims 1-12 in Berthold, et al.

Moreover, Applicant respectfully traverses the current rejection since the Examiner has not made clear: (A) the differences between the inventions defined by the conflicting claims; and (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent. See MPEP §804 (1).

The Examiner has tried to remedy this deficiency by stating on page 3, lines 20-22, of the current Office Action,

Although the conflicting claims are not identical, they are not patentably distinct from each other because the molding composition disclosed by Berthold et al. (US Patent 6,713,561) overlaps the limitations of the composition in the instant claims. (Emphasis added)

However, when determining whether the invention defined in a claim of an application would have been an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art. *General Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1279, 23 USPQ2d 1839, 1846 (Fed. Cir. 1992), (Emphasis added). Additionally, the obviousness-type double patenting rejection should make clear:

- (A) The differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent.

Thus, since the Examiner is relying on the disclosure of Berthold, et al., which as discussed *supra* Applicant respectfully believes does not anticipate or render obvious Applicant's currently claimed polyethylene compositions, Applicant respectfully believes the Examiner has not used the correct standard for determining a double patenting rejection. See MPEP §804 (1).

In particular, Applicant believes the Examiner has not properly compared the currently pending claims in the above-captioned application to the allowed claims in Berthold, et al., and outlined: (A) the differences between the inventions defined by the conflicting claims; and (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the currently rejected claims are anticipated by, or would have been an obvious variation of, the invention defined in a claim or claims in the cited patent. See MPEP §804 (1).

Accordingly, Applicant respectfully believes the current rejection should be withdrawn.

Currently pending claims 6-9:

Claim 6 of the current application recites,

A process for producing a polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm³ at 23 °C, a MFI_{190/5} in the range from 0.1 to 0.3 dg/min or a MFI_{190/21.6} in the range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition, and the polyethylene composition comprises a stress-crack resistance (FNCT) in the range of from 60 to 110 h, wherein the monomers are polymerized in slurry in a temperature range of from 60 to 90 °C at a pressure in the range of from 0.15 to 1 MPa, and in the presence of a high-mileage Ziegler catalyst composed of a transition metal compound and of an organoaluminum compound, the process comprising conducting polymerization in three

stages, where the molecular mass of the polyethylene prepared in each stage is regulated with the aid of hydrogen, thereby forming a hydrogen concentration in each stage.

Applicant respectfully believes none of claims 1-12 in Berthold, et al. recite the same, or an obvious variant, of currently pending claim 6. Additionally, currently pending claims 7-9 depend directly or indirectly from currently pending claim 6, and necessarily include all of the limitations therein.

As such, Applicant believes claims 6-9 are patentably distinct from claims 1-12 in Berthold, et al.

Moreover, Applicant respectfully traverses the current rejection since the Examiner has not made clear: (A) the differences between the inventions defined by the conflicting claims; and (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent. See MPEP §804 (1).

The Examiner has tried to remedy this deficiency by stating on page 3, lines 20-22, of the current Office Action,

Although the conflicting claims are not identical, they are not patentably distinct from each other because the molding composition disclosed by Berthold et al. (US Patent 6,713,561) overlaps the limitations of the composition in the instant claims. (Emphasis added)

However, when determining whether the invention defined in a claim of an application would have been an obvious variation of the

invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art. *General Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1279, 23 USPQ2d 1839, 1846 (Fed. Cir. 1992), (Emphasis added). Additionally, the obviousness-type double patenting rejection should make clear:

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- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent.

Thus, since the Examiner is relying on the disclosure of Berthold, et al., which as discussed *supra* Applicant respectfully believes does not anticipate or render obvious Applicant's currently claimed polyethylene compositions, Applicant respectfully believes the Examiner has not used the correct standard for determining a double patenting rejection. See MPEP §804 (1).

In particular, Applicant believes the Examiner has not properly compared the currently pending claims in the above-captioned application to the allowed claims in Berthold, et al., and outlined:

- (A) the differences between the inventions defined by the conflicting claims; and
- (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the

currently rejected claims are anticipated by, or would have been an obvious variation of, the invention defined in a claim or claims in the cited patent. See MPEP §804 (1).

Accordingly, Applicant respectfully believes the current rejection should be withdrawn.

Currently pending claim 10:

Claim 10 of the current application recites,

A process for producing a container having a capacity in a range from 10 to 150 dm³ (l) from a polyethylene composition with multimodal molecular mass distribution, which has a density in the range of from 0.949 to 0.955 g/cm³ at 23 °C, a MFI_{190/5} in the range from 0.1 to 0.3 dg/min or a MFI_{190/21.6} in the range of 4 to 6 dg/min, and which comprises from 38 to 45 % by weight of a low-molecular-mass ethylene homopolymer A; from 30 to 40 % by weight of a high-molecular-mass copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbon atoms; and from 18 to 26 % by weight of an ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer, wherein all of the percentage data are based on the total weight of the molding composition, and the polyethylene composition comprises a stress-crack resistance (FNCT) in the range of from 60 to 110 h, the process comprising:

- (a) plasticizing the polyethylene composition in an extruder in a temperature range of from 200 to 250 °C;
- (b) extruding the product of step (a) through a die into a blow mold;
- (c) blowing up the product of step (b) in a blow molding apparatus, thereby forming the container; and
- (d) solidifying the container by cooling.

Applicant respectfully believes none of claims 1-12 in Berthold, et al. recite the same, or an obvious variant, of

currently pending claim 10.

As such, Applicant believes claim 10 is patentably distinct from claims 1-12 in Berthold, et al.

Moreover, Applicant respectfully traverses the current rejection since the Examiner has not made clear: (A) the differences between the inventions defined by the conflicting claims; and (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent. See MPEP §804 (1).

The Examiner has tried to remedy this deficiency by stating on page 3, lines 20-22, of the current Office Action,

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However, when determining whether the invention defined in a claim of an application would have been an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art. *General Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1279, 23 USPQ2d 1839, 1846 (Fed. Cir. 1992), (Emphasis added). Additionally, the obviousness-type double patenting rejection should make clear:

- (A) The differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and
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Thus, since the Examiner is relying on the disclosure of Berthold, et al., which as discussed *supra* Applicant respectfully believes does not anticipate or render obvious Applicant's currently claimed polyethylene compositions, Applicant respectfully believes the Examiner has not used the correct standard for determining a double patenting rejection. See MPEP §804 (1).

In particular, Applicant believes the Examiner has not properly compared the currently pending claim in the above-captioned application to the allowed claims in Berthold, et al., and outlined:

(A) the differences between the inventions defined by the conflicting claims; and (B) the reasons why a person of ordinary skill in the art would conclude that the invention defined in the currently rejected claim is anticipated by, or would have been an obvious variation of, the invention defined in a claim or claims in the cited patent. See MPEP §804 (1).

Accordingly, Applicant respectfully believes the current rejection should be withdrawn.

CONCLUSION

Based upon the above remarks and amendments submitted herein, the presently claimed subject matter is believed to be novel and patentably distinguishable over the prior art of record. The Examiner is therefore respectfully requested to reconsider and withdraw the rejections, and allow pending claims 1-10. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned practitioner if she has any questions or comments, or such action would expedite prosecution of this application.

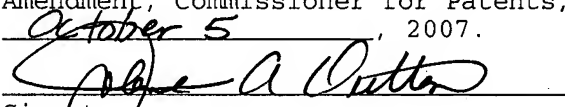
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